

Planning, People, and Process: Keys to a successful large diameter multi sensor inspection

NASTT Municipal Outreach Conference

Cooperstown, New York

November 16th, 2017

Matt Timberlake – Ted Berry Company Inc.

Adam Slifko – CUES Inc.



Speakers



Matt Timberlake

President Ted Berry Company Inc.



Adam Slifko

Business development Manager Pipeline Inspection Partners Corp. a Division of CUES



Session Outline:

1. Project Overview

2. Planning

1. Ted Berry
2. CUES

3. People

1. Ted Berry
2. CUES

4. Process

1. Ted Berry
2. CUES

5. Questions



Project Overview

Project Owner: Massachusetts Water Resources Authority (MWRA)

Consultant: Hazen and Sawyer

Contractor: Ted Berry Company Inc.

MSI Equipment Supplier: CUES Inc. (Pipeline Inspection Partners Corp.)

Safety and Rescue Team: Life Safety Specialists

Conduct a comprehensive inspection and evaluation of the North Metropolitan sewer in Winthrop Mass.

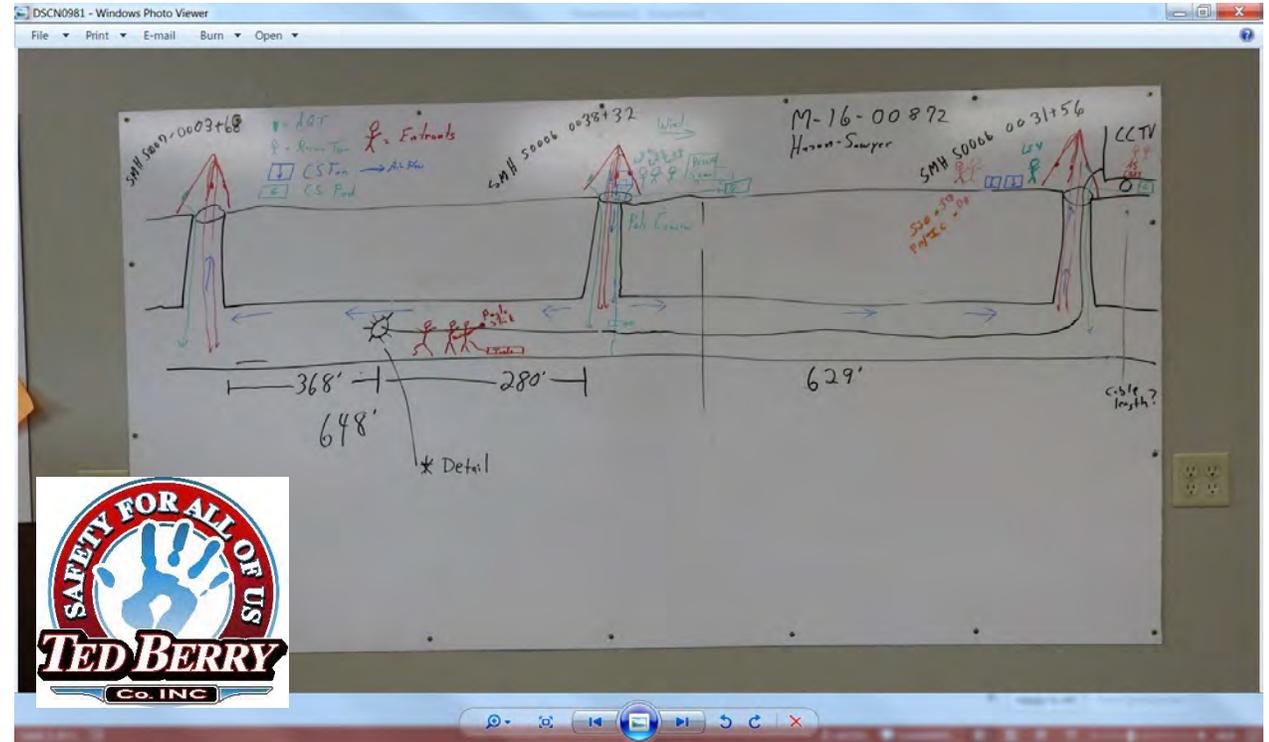
1. 15,023lf of 108” brick sewer
 1. Manned entry
 1. Visual inspection
 2. Sounding
 3. Collect core samples
 2. Core sampling
 3. 3D MSI

**Why we are really here?
Help prolong the life of the buried assets entrusted to us.**



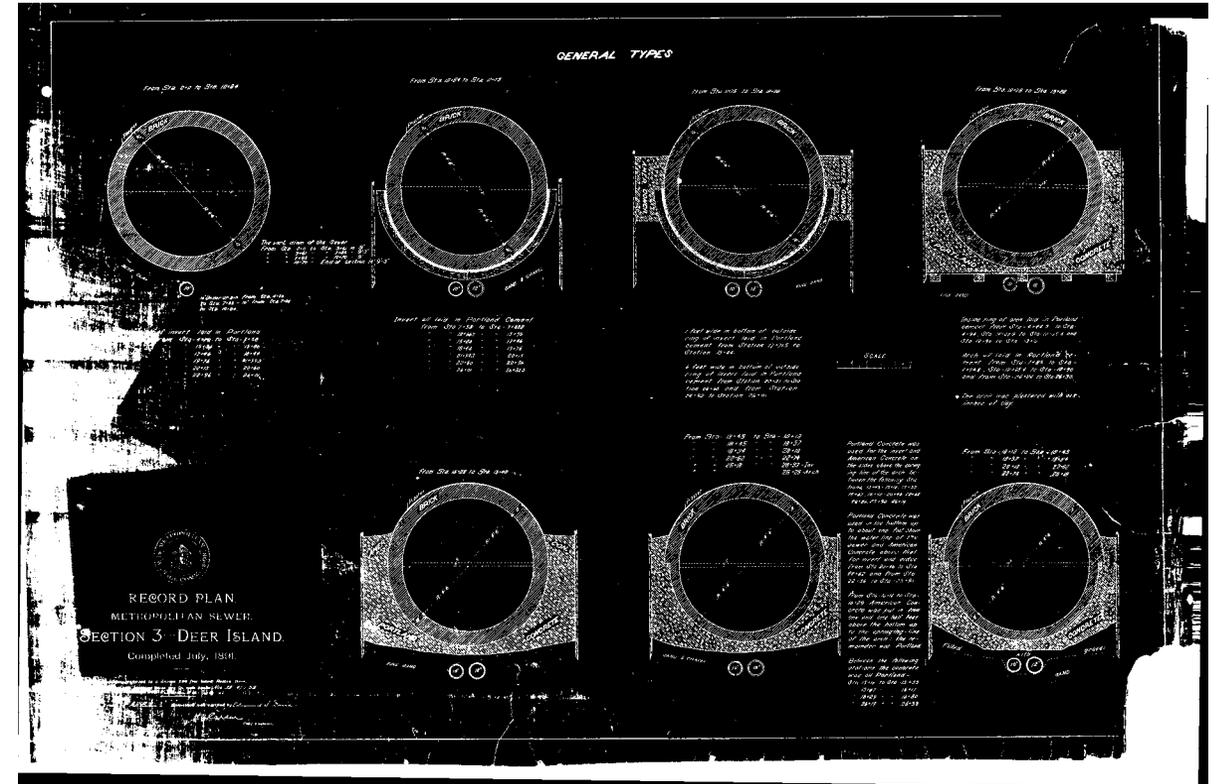
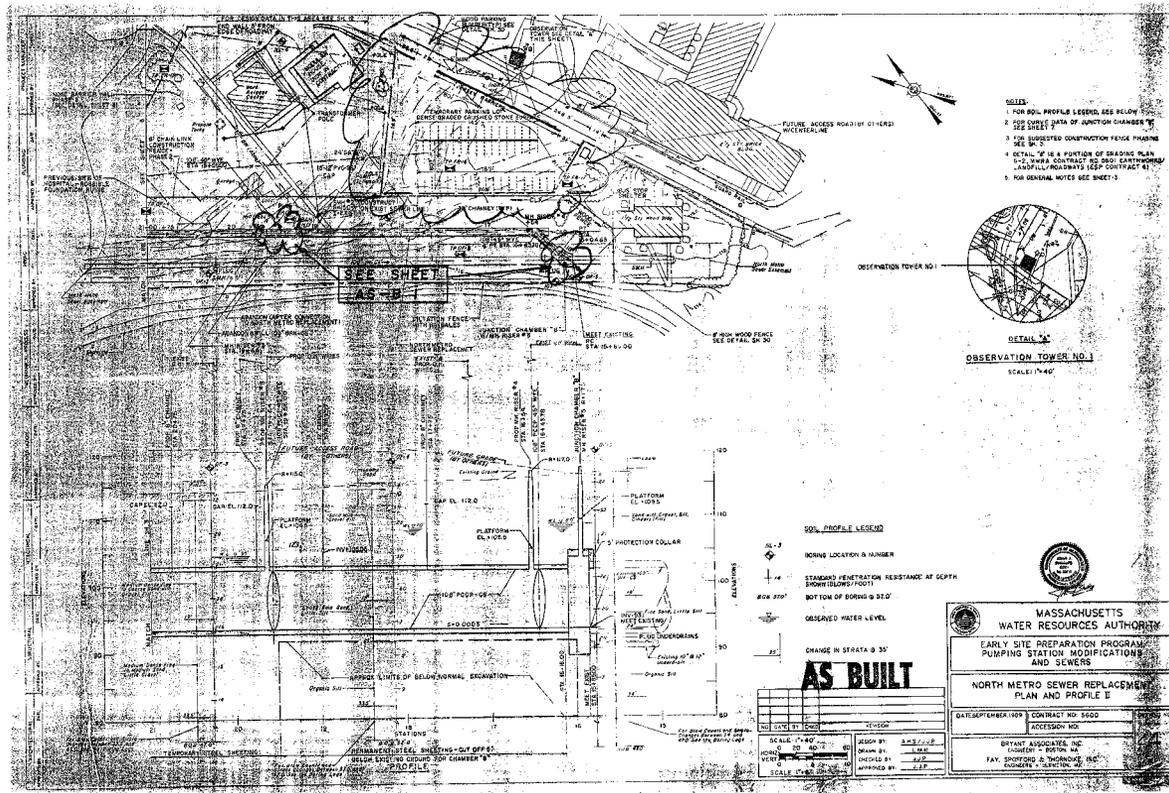
Planning (Ted Berry Company)

1. Understand the scope of work
2. Understand the stakeholders
3. Development of comprehensive HASP (health and safety plan)
4. Technology selection
5. Assign project team
6. Development of the Field Work Plan (FWP)
7. Crew preparedness



Internal collaborative approach to developing comprehensive HASP for project. NOT a generic off the shelf approach.

Planning (Ted Berry Company)(CUES)



Plans review.

Planning (Ted Berry Company)(CUES)

SMH S0007-0003+68

3 Sets Tripod,
Man Winch, Fall
Protection
Winch, 4 Gas
Meter w remote
probe, Manhole
Barricade

SMH S0006-0038+32

RESCUE TEAM
Pod w Decon

SMH S0006-0031+56

TBCI
Project
Manager
and SSO

TBCI
CCTV

AQT

CONFINED
SPACE FAN

POLE CAMERA

CONFINED
SPACE POD

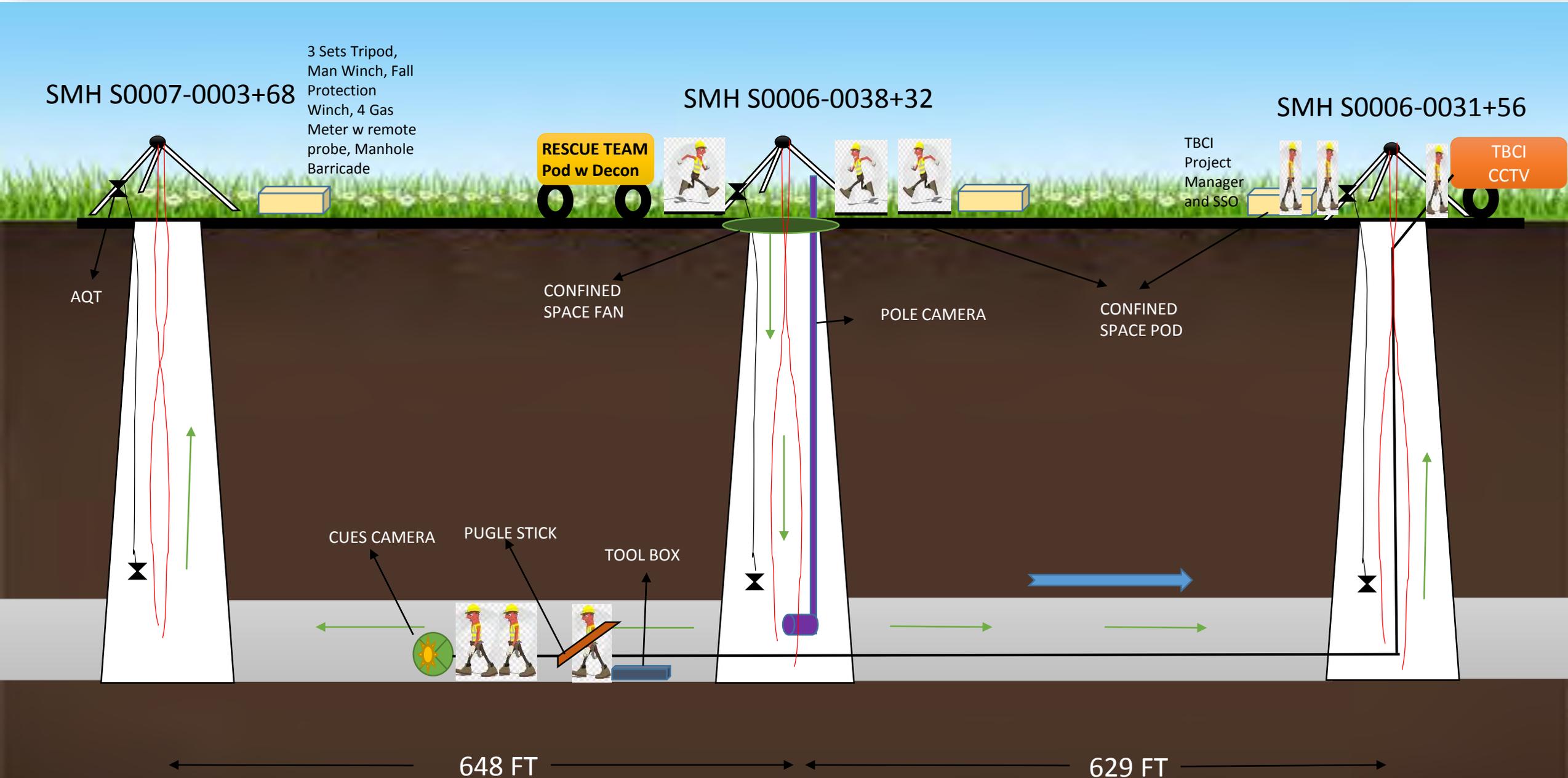
CUES CAMERA

PUGLE STICK

TOOL BOX

648 FT

629 FT

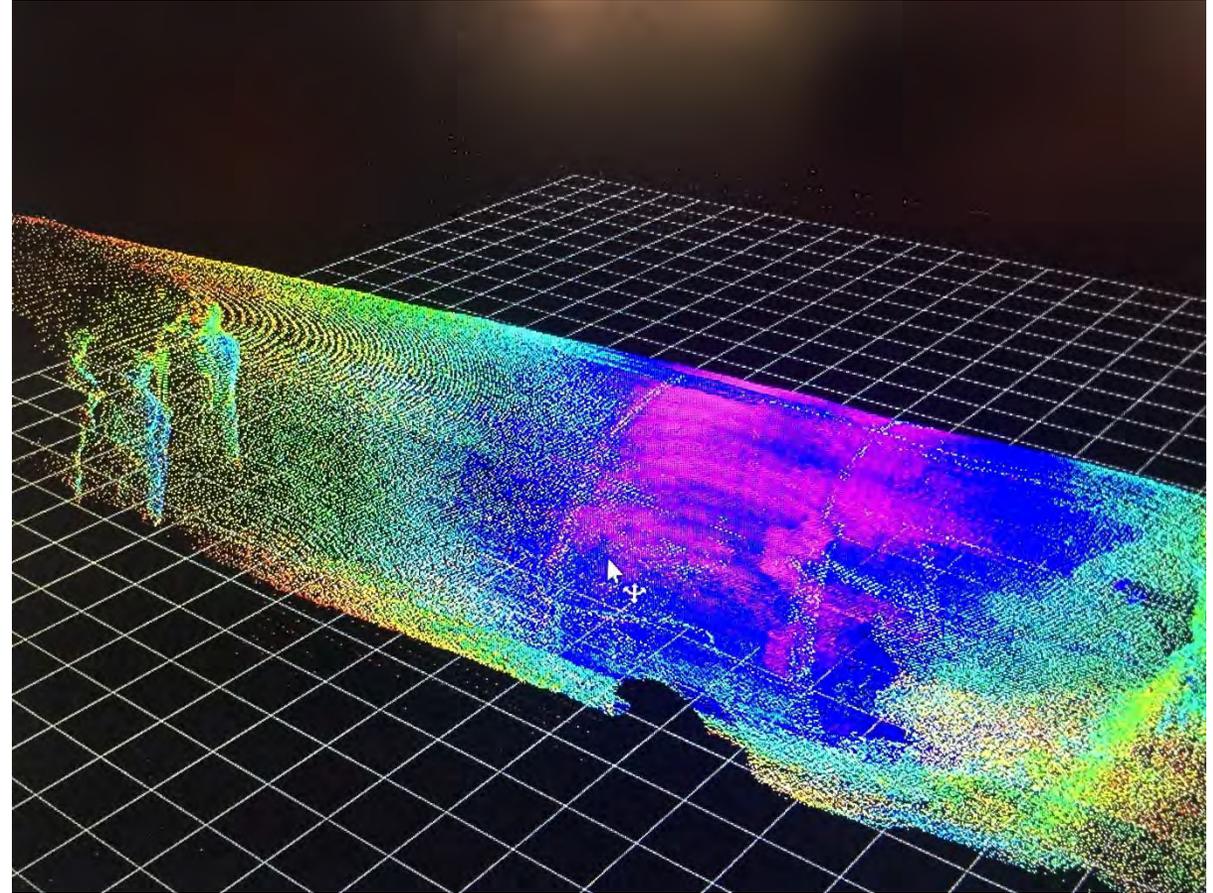


Planning (CUES)

Technology Selection

CUES SolidFX Multi Sensor Inspection (MSI)

- A. Digital Universal Camera (DUC)
- B. LiDAR
- C. Digital Sonar
- D. Use skid transport system in conjunction with manned entry that was required



People (Ted Berry Company Inc.)



“Your attitude will determine your altitude”

Essential to have a total team effort.

Division of responsibilities (production and safety hand in hand).

Highly competent team leaders.

People



“People are more important than things”
Randy Pausch

People (CUES Inc.)

- Collaboration between CUES and Ted Berry Team



Process (Ted Berry Company Inc.)

- Little things are big things
- Mobil Porta-Potty
- Pugil stick
- Two way communications systems
- Entry gear
- Air quality best practices
- Core sampling approach
- LOTO process (Carusso P.S.)
- Decon process
- Wet weather plan



- Work to be performed at night
- Start of every shift a planning and safety meeting, lessons learned, open and honest communication.



Process (Ted Berry Company Inc.)

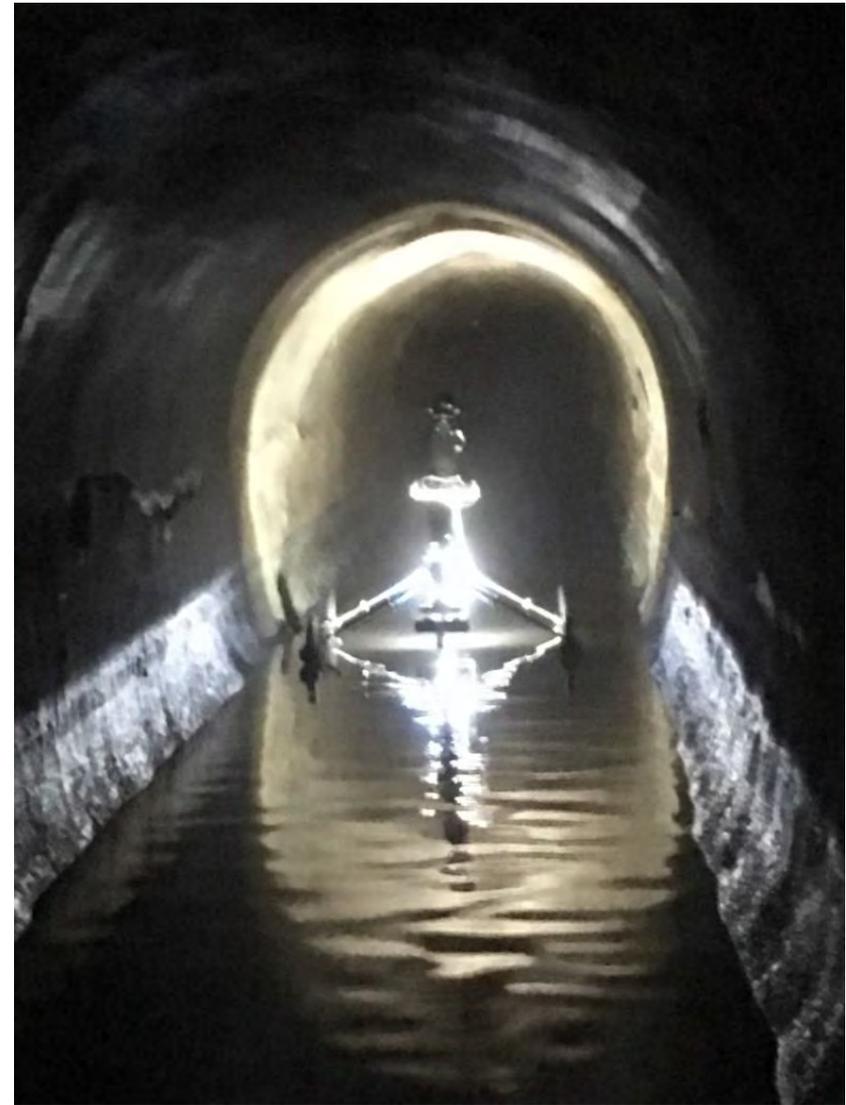
Entry and Safety



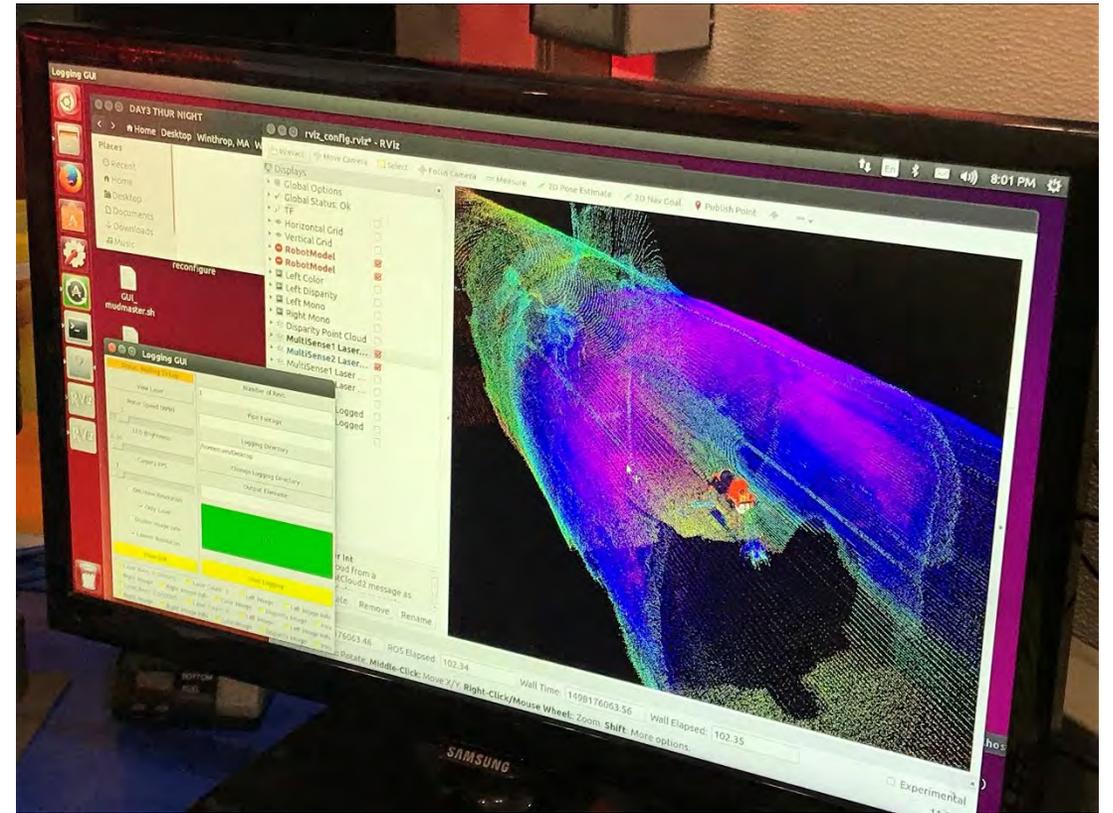
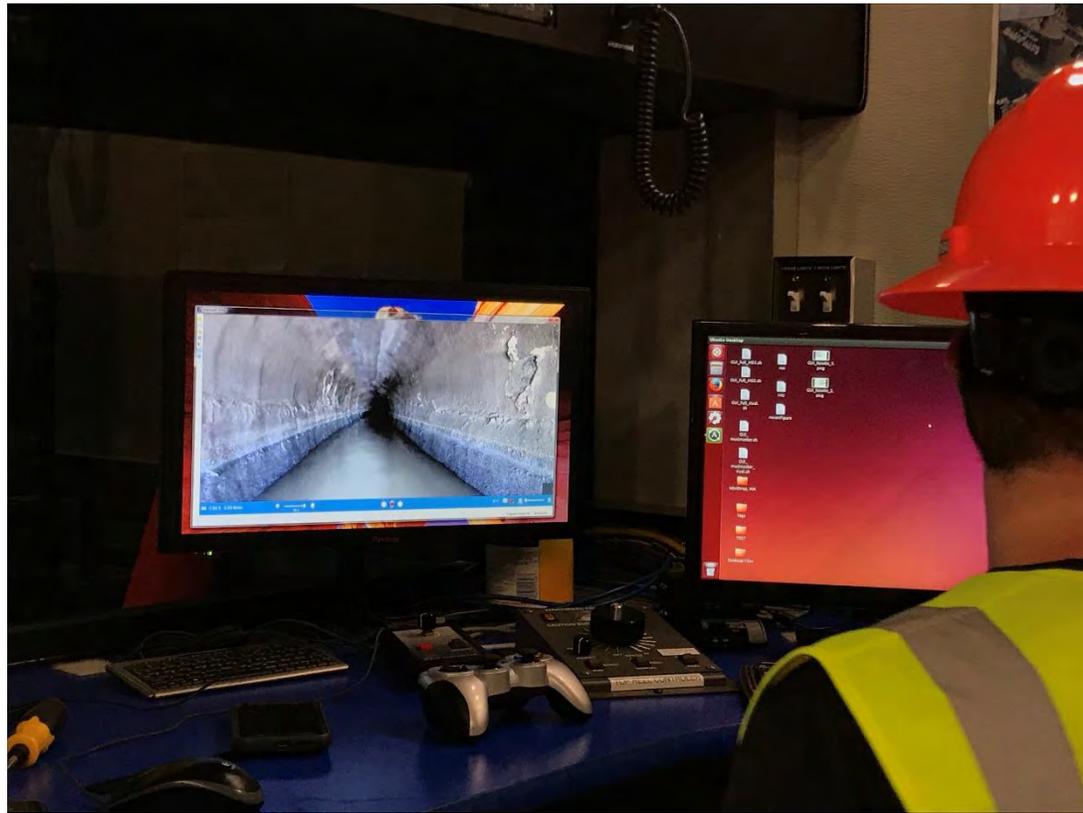
Inspection and Production



Process (CUES)



Process (CUES)



Feedback

“This was an out of the ordinary project and a tough job. The health and safety plan, sounding techniques, and multi-sensor approach made it a success.”

Kevin Rafferty Hazen and Sawyer



Questions

Matt Timberlake

matt@tedberrycompany.com

@NoDigMaine

Adam Slifko

aslifko@cuesinc.com

